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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,257	08/21/2003	Kailing James Su	139137	7326

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RG and Associates
1103 Twin Creeks
Allen, TX 75013

EXAMINER

JUNTIMA, NITTAYA

ART UNIT	PAPER NUMBER
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2462

NOTIFICATION DATE	DELIVERY MODE
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07/09/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/645,257	SU ET AL.	
	Examiner	Art Unit	
	NITTAYA JUNTIMA	2462	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-14 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 and 8-14 is/are allowed.
- 6) ☒ Claim(s) 17-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the RCE filed on 6/18/2010.
2. **Claims 1-6, 8-14 and 17-22** are pending (claims 7, 15, and 16 were cancelled).

Claim Objections

3. **Claims 7 and 9** are objected to because of the following informalities:
 - **Claim 7** is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The functions of distributing the statistics reports is recited in claim 1 (lines 9 and 13-14; a monitor resource controller for distributing the statistics reports is included in the FMS).
 - **Claim 9**, line 24, "the resource server system controls" should be changed to "the control of means for controlling" to avoid lack of antecedent basis on the resource server system and be consistent with line 18 of claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 21, it is unclear whether “a flow measurement system” in line 2 is the same as “a monitory resource controller” in line 8 of claim 17 since both perform the same function of generating statistic reports.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 17-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Choi (US 2004/0109414 A1) in view of Shin (US 2002/0138643 A1).

Regarding claims 17-22, Choi teaches a method of providing multi-time scale resource management in a packet router (300, Fig. 3, paragraph 0023), the method comprising:

Managing, by a managed agent, a differentiated services policy information database that stores policies on forwarding packets in the packet router (since the policy based control unit 405 in Fig. 4 enables the QoS control unit 404 and the DiffServ control unit 406 to perform control operations on the basis of policies, paragraph 0024, the policies must be managed by a managed agent and stored in a database and accessible by the policy based control unit 405).

Controlling forwarding of packets in the packet router by a resource server system (router control unit 310, Fig. 3 and 400 in Fig. 4 performs the function of routing control, paragraphs 0023 and 0024).

Monitoring packet flows through the packet router by a flow measurement system (monitoring means must be included in order for event/status information can be sent in step S75 of Fig. 7 by the eGSMP SLAVE 702, paragraphs 0023 and 0034).

Generating statistics reports that affect the forwarding of packets in the packet router by a monitor resource controller/the flow measurement system (eGSMP SLAVE 702) and distributing the generated statistics reports (router statistics information is generated and sent in step S74, Fig. 7 by the eGSMP SLAVE 702 to the eGSMP MASTER 701 which is part of the router control unit 310, Fig. 3, paragraphs 0024 and 0034).

Receiving and forwarding packets in response to the control of forwarding of packets in the packet router by a hardware forwarding engine (packet forwarding function including DiffServ based QoS function is performed by the ingress processing unit 540 and the egress processing unit 550 in Fig. 5, collectively, paragraph 0025).

However, Choi fails to explicitly teach (i) that the step of controlling forwarding of packets in the packet router is based on adaptive selections of policies from the policy information database, and the steps of (ii) controlling adaptation of the packet router to dynamic service requirements and resource conditions and (iii) receiving adaptive selections of policies from the policy information database as recited in the claim.

As shown in Fig. 1 of an analogous art, Shin teaches a system for adaptive controlling network traffic to a server with an adaptive traffic-shaping feature having a policy manager daemon for storing a set of rule data which represents different service policies for servicing the network traffic, paragraphs 0036, 0039, 0080-0084, and claim 11. Shin further teaches that the load controller/means controls the processing of the incoming packet requests by adaptively selecting a subset of the rule data provided by the a policy manager daemon, paragraphs 0039, 0067, and 0070-0072 (equivalent to controlling forwarding of packets in the packet router based on adaptive selections of policies from the policy information database). Shin further teaches that the policy manager dynamically adjusts its estimate of the focal point/operating point used in creating a filter-hierarchy (FH) as system load or request arrival rates change and the FH is used by the load controller to control the processing of incoming packet requests, paragraph 0083 (equivalent to the steps of controlling adaptation of the packet router to dynamic service requirements and resource conditions and receiving adaptive selections of policies from the policy information database).

Given the teaching of Shin, it would have been obvious to one skilled in the art at the time of the invention to incorporate and apply the adaptive traffic-shaping concept of Shin in the teaching of Choi such that the limitations i, ii, and iii would be included as claimed. The suggestion/motivation to do so would have been to adapt the traffic shaping policies without any a priori capacity analysis or static resource reservation as suggested by Shin (paragraph 0059, lines 9-11).

Allowable Subject Matter

7. **Claims 1-5 and 8-14** are allowed.

Response to Arguments

8. Applicant's arguments filed 6/18/2010 have been fully considered but they are not persuasive.

A. In the remarks on page 8 regarding claim 17, the applicant argues that Choi fails to teach (a) “managing a differentiated services policy information database that stores policies on forwarding packets in the packet router”, (b) “monitoring packet flows through the packet router”, and (c) “generating statistics reports by a monitor resource controller.”

In response, the examiner respectfully disagrees.

In particular, regarding limitation (a), Fig. 4 of Choi shows a router control 400 that has the policy based control unit 405 enables the QoS control unit 404 for performing a QoS control operation and the DiffServ control unit 406 for providing QoS to perform control operations on the basis of policies (paragraph 0024). In addition, Choi teaches that a router provides QoS on the basis of DiffServ (paragraph 0032). Therefore, since the control operations of the policy based control unit 405 are based on the QoS policies, the QoS policies must be managed and stored in a database, by a means (reads on the claimed managed agent), to be referred to and utilized by the unit 405.

Regarding limitation (b), step S75 in Fig. 7 of Choi shows that an event/status information is being sent from eGSMP slave (i.e., line interface units 321-324 in Fig. 3, paragraph 0023) to eGSMP master (i.e., router control unit 310 in Fig. 3, paragraph 0023). Therefore, in order for the event/status information to be generated and transmitted from the

slave to the master, the event/status must be monitored and detected by a means within the eGSMP slave (reads on the claimed flow measurement system).

Regarding limitation (c), step S74 in Fig. 7 of Choi shows that router statistics information is being sent from eGSMP slave to eGSMP master. Therefore, a means within the eGSMP slave (reads on the claimed monitor resource controller/flow measurement system) must generate the statistics reports for transmission to the eGSMP master.

Accordingly, it is respectfully submitted that all claim limitations are met. The rejection is therefore maintained.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NITTAYA JUNTIMA whose telephone number is 571-272-3120. The examiner can normally be reached on Monday through Friday, 9:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business

Application/Control Number: 10/645,257

Page 8

Art Unit: 2462

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

/Nittaya Juntima/

Primary Examiner, Art Unit 2462

7/3/2010